

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

Claim 1 (currently amended): A system for providing a GPS enabled antenna, comprising:

an antenna;

a switching module coupled to the antenna;

communications band circuitry;

a global positioning system (GPS) module ~~coupled to the switching module~~; and

an impedance matching circuit in the GPS module constructed to match impedance at approximately a GPS signal frequency,

wherein the switching module is adapted to selectively couple a signal feed from the antenna to one of the GPS module and the communications band circuitry.

Claim 2 (previously presented): The system according to claim 1, further comprising:

a diplexer coupled between the antenna and the switching module,

wherein the antenna is constructed as a dual-band antenna.

Claim 3 (previously presented): The system according to claim 2, wherein the diplexer is adapted to couple first band signals to a first band diplexer and second band signals to a second band diplexer.

Claim 4 (previously presented): The system according to claim 3, wherein the second band signals are cellular band signals.

Claim 5 (previously presented): The system according to claim 3, wherein the second band signals are band signals at approximately 800 MHz.

Claim 6 (previously presented): The system according to claim 3, wherein the first band signals are personal communications service (PCS) band signals.

Claim 7 (previously presented): The system according to claim 3, wherein the first band signals are band signals at approximately 1900 MHz.

Claim 8 (previously presented): The system according to claim 1, wherein the GPS module includes a GPS low noise amplifier.

Claim 9 (previously presented): The system according to claim 1, wherein the impedance matching circuit is adapted to provide tuning for the GPS band.

Claim 10 (previously presented): The system according to claim 1, wherein the GPS module includes the impedance matching circuit and a GPS low noise amplifier, the impedance matching circuit being coupled to the switching module, and the GPS low noise amplifier being coupled to the impedance matching circuit.

Claim 11 (previously presented): The system according to claim 1, wherein the switching module includes a two-way switch.

Claim 12 (currently amended): The system according to claim 11, ~~further comprising:~~
wherein the communications band circuitry is coupled to a first port of the two-way switch,
wherein the GPS module is coupled to the second port of the two-way switch.

Claim 13 (previously presented): The system according to claim 1, wherein the switching module includes a three-way switch.

Claim 14 (previously presented): The system according to claim 13, further comprising:
cellular band circuitry coupled to a first port of the three-way switch; and
PCS band circuitry coupled to a second port of the three-way switch,
wherein the GPS module is coupled to a third port of the three-way switch.

Claim 15 (currently amended): A wireless communications device, comprising:
an antenna;

a diplexer coupled to the antenna;
a switching module coupled to the diplexer;
a global positioning system (GPS) module ~~coupled to the switching module~~; and
a personal communications service (PCS) band diplexer ~~coupled to the switching module~~,
module,

wherein the switching module is adapted ~~to switch GPS band signals to the GPS module and PCS band signals to the PCS band diplexer~~ to selectively couple the diplexer to one of the GPS module and the PCS band diplexer.

Claim 16 (previously presented): The device according to claim 15, further comprising:
a cellular band diplexer coupled to the diplexer.

Claim 17 (previously presented): The device according to claim 16, wherein the diplexer is adapted to couple cellular band signals to the cellular band diplexer.

Claim 18 (previously presented): The device according to claim 15, wherein the diplexer is adapted to couple PCS band signals to the switching module.

Claim 19 (previously presented): The device according to claim 15, wherein the diplexer is adapted to couple GPS band signals to the switching module with attenuation.

Claim 20 (previously presented): The device according to claim 19, wherein the attenuation is approximately -0.3 dB.

Claim 21 (previously presented): The device according to claim 15, wherein the GPS module includes an impedance matching module, the impedance matching module being coupled to the switching module.

Claim 22 (previously presented): The device according to claim 21, wherein the impedance matching module is adapted to provide tuning at approximately the GPS band.

Claim 23 (previously presented): The device according to claim 22, wherein the GPS module further includes a GPS low noise amplifier, the GPS low noise amplifier being coupled to the impedance matching module.

Claim 24 (previously presented): The device according to claim 15, wherein the diplexer includes a high pass frequency response with a cutoff frequency at approximately 1600 MHz.

Claim 25 (previously presented): The device according to claim 15, wherein the diplexer includes a high pass frequency response with a cutoff frequency at approximately 1400 MHz.

Claim 26 (previously presented): The device according to claim 25, wherein the diplexer provides GPS band signals to the switching module with less attenuation than if the

diplexer included the high pass frequency response with the cutoff frequency at approximately 1600 MHz.

Claim 27 (previously presented): The device according to claim 15, wherein the diplexer includes a high pass frequency response with a cutoff frequency designed to reduce attenuation of the GPS band signals.

Claim 28 (previously presented): The device according to claim 15, wherein the diplexer includes a frequency response designed to reduce attenuation of the GPS band signals.

Claim 29 (currently amended): A method for providing a global positioning system (GPS) enabled antenna, comprising the steps of:

(a) providing an antenna tuned to receive a wireless communications signal in a communications band;

(b) receiving at the antenna a wireless communications signal;

(c) receiving at the same antenna a GPS signal;

(d) propagating a combined signal to a switching module, the combined signal including the GPS signal and the wireless communications signal;

(e) switching, via the switching module, the combined signal to one of a GPS module and a communications band circuit; and

(f) extracting the GPS signal from the combined signal using the GPS module.


Claim 30 (previously presented): The method according to claim 29, wherein the extracting step further includes matching an impedance at approximately the frequency of the GPS signal.

Claim 31 (previously presented): The method according to claim 29, wherein the step (b) includes the step of lowering a cutoff frequency of a high pass frequency response in the diplexer to reduce attenuation of the GPS signal.

Claim 32 (previously presented): A method for providing a global positioning system (GPS) enabled antenna,

(a) receiving a wireless communications signal from at least one communications band;

(b) coupling, via a triplexer, GPS band signals of the wireless communications signal to a GPS module;

 (c) coupling, via the triplexer, first band signals of the wireless communications signal to the first band duplexer; and

(d) coupling, via the triplexer, second band signals of the wireless communications signal to the second band duplexer.

Claim 33 (previously presented): The method according to claim 32, wherein the step (c) includes the step of coupling, via the triplexer, personal communications service (PCS) band signals of the wireless communications signal to the PCS band duplexer.

Claim 34 (previously presented): The method according to claim 32, wherein the step (d) includes the step of coupling, via the triplexer, cellular band signals of the wireless communications signal to the cellular band duplexer

Claim 35 (currently amended): A method for receiving incoming signals from at least one of three signal bands on a single dual-band antenna of a wireless handheld communications device, comprising the steps of:

separating, via a diplexer, first band signals from the incoming signals and coupling the filtered first band signals to a first band duplexer;

separating, via the diplexer, at least one of second band signals and third band signals from the incoming signals and coupling the at least one of the second band signals and the third band signals to a switching module; and

at least one of (a) coupling the second band signals to a second band duplexer and (b) coupling the third band signals to a third band module.
